

Patent Claims

1. Method of treating a patient with a disorder, characterized by an activating mutation in the Ras proto-oncogene, comprising contacting cells of said patient with a protein having the toxic activity of Clostridium sordellii toxin LT under conditions favoring inactivating of Ras by glucosylation of Ras subfamily proteins.
2. The method according to claim 1, characterized in that the disorder is pancreas or colon cancer.
3. The method according to claim 1 wherein said protein is an immunotoxin.
4. The method according to claims 1 to 3 wherein said immunotoxin contains a first part, a second part, and a third part, connected by covalent bonds:
- (i) the first part including a target cell specific binding domain, which domain is able to cause the immunotoxin to bind to said patient's cell;
 - (ii) the second part including a translocation domain of a protein, which domain is capable of translocating the third part across the cytoplasmic membrane of the cell, and
 - (iii) the third part including a polypeptide with the toxic activity of the catalytic domain of toxin LT from Clostridium sordellii LT.
5. The method according to claims 4, characterized in that the target cell specific binding domain is an antibody or an active fragment thereof.
6. The method according to claim 5 wherein the antibody or active fragment thereof specifically binds to tumor cells.
7. A composition useful in treating a pathological condition, characterized by activation of Ras proto-oncoproteins, comprising a first part, a second part, and a third part, connected by covalent bonds:
- (i) the first part including a target cell specific binding domain, which domain is able to cause the immunotoxin to bind to said patient's cell;

- (ii) the second part including a translocation domain of a protein, which domain is capable of translocating the third part across the cytoplasmic membrane of the cell, and
- (iii) the third part including a polypeptide with the toxic activity of the catalytic domain of toxin LT from *Clostridium sordellii* LT,

and a pharmaceutically acceptable carrier.

8. An immunotoxin which contains a first part, a second part, and a third part, connected by covalent bonds:

- (i) the first part including a target cell specific binding domain, which domain is able to cause the immunotoxin to bind to said patient's cell;
- (ii) the second part including a translocation domain of a protein, which domain is capable of translocating the third part across the cytoplasmic membrane of the cell, and
- (iii) the third part including a polypeptide with the toxic activity of the catalytic domain of toxin LT from *Clostridium sordellii* LT.

9. An immunotoxin according to claim 8, characterized in that the target cell specific binding domain is an antibody or an active fragment thereof.

10. Method of manufacturing a therapeutic agent, characterized by combining a therapeutically useful amount of an immunotoxin according to claim 8 with a therapeutically acceptable adjuvant or carrier.

11. Method of treating a patient with a disorder, characterized by an activating mutation in the Ras proto-oncogene, comprising contacting cells of said patient with a retroviral or non-viral vector utilizable for transformation of tumor cells, which mediates expression of the aminoterminal 1020 amino acids, or a fragment thereof with preserved glucosyltransferase activity.

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